

CLAIMS

What is claimed is:

1. An impact absorbing body disposed below feet of an occupant of an automobile as interposed between a body panel and a floor covering laid apart from the body panel toward a cabin, characterized in that

a plurality of load supporting portions, having V-lettered cross-sections forming grooves arranged parallel to a face facing toward the cabin of said body panel, are disposed side by side along the face facing toward the cabin of said body panel and neighboring load supporting portions are connected by a flat-plate-shaped bridge portion.

2. The impact absorbing body according to claim 1, characterized in that the neighboring load supporting portions are connected at ends thereof on a side toward the floor covering by the flat-plate-shaped bridge portion.

3. The impact absorbing body according to claim 1, wherein the body panel below the feet of the occupant has a flat-shaped flat portion and a rising wall portion extended obliquely upward from a front edge of the flat portion, and

each of said load supporting portions and said bridge portions are disposed over both said flat portion and said rising wall portion.

4. The impact absorbing body according to claim 1, configured such that, when energy absorbed thereby when compressed in its thickness direction is 30 J, then generated responsive load is less than 3.0 kN.

5. The impact absorbing body according to claim 1, characterized in that it is made from a material obtained by foaming a synthetic resin material.

6. The impact absorbing body according to claim 5, wherein each of said load supporting portion has a thickness of 6 - 15 mm and said bridge portion has a thickness of 3 - 15 mm.

7. The impact absorbing body according to claim 6, wherein a length of a face facing toward the cabin of said bridge portion in a direction parallel to the face facing toward the cabin of said body panel and also in a direction perpendicular to the groove formed by said load supporting portion is 20 - 50 mm.

8. The impact absorbing body according to claim 5, wherein a wedge angle on a cross-section of the groove formed by said load supporting portions having the V-lettered cross-section is 5 - 60°.

9. The impact absorbing body according to claim 1, characterized in that said bridge portion is provided therein with a plurality of through holes having a diameter of 5 - 10 mm.

10. The impact absorbing body according to claim 1, characterized in that it is provided by molding an aggregate of cylindrical resin granules produced by foaming a synthetic resin material and forming the foamed material into a cylindrical shape.

11. The impact absorbing body according to claim 10, characterized in that said cylindrical resin granule has its inner face roughened.

12. The impact absorbing body according to claim 10, wherein said cylindrical resin granule has a hollow portion formed to have a cross-section of an elliptical shape and the ellipticity of the elliptical shape is 10 - 70%.

13. The impact absorbing body according to claim 10, wherein a majority of said cylindrical resin granules within said impact absorbing body are arranged to be out of alignment with a thickness direction thereof.

14. The impact absorbing body according to claim 10, characterized in that it is configured to

have an air permeability of $2.0 \text{ cc/cm}^2/\text{sec}$ or above in accordance with JIS L1096.

15. The impact absorbing body according to claim 10, characterized in that, in a state where said impact absorbing body is laminated on a face facing toward outside the automobile of said floor covering, a laminate of said floor covering and said impact absorbing body is configured to have a permeability greater than $0 \text{ cc/cm}^2/\text{sec}$ and smaller than $90 \text{ cc/cm}^2/\text{sec}$.

16. The impact absorbing body according to claim 10, wherein a face facing toward outside the automobile of said impact absorbing body is roughened.

17. The impact absorbing body according to claim 10, characterized in that it is provided by molding an aggregate of cylindrical resin granules into a form having concavities and convexities on a face thereof facing toward outside the automobile and it has a felt laminated on the concaved and convexed face facing toward outside the automobile.